



## *Luisia zeylanica* Lindl. (Orchidaceae): A New Record for Himachal Pradesh

### Abstract

*Luisia zeylanica* Lindl., a vandoid species of epiphytic orchids, is reported for the first time from Himachal Pradesh, extending thereby its north-western limit of distribution in the Himalaya beyond Garhwal region. Description and illustrations of the species are provided.

**Keywords:** *Luisia zeylanica*, New Record, Himachal Pradesh

### Introduction

Authors collected a species of *Luisia* Gaudich. from Himachal Pradesh which was identified as *Luisia zeylanica* Lindl. after critical examination and references to relevant floras (Hooker, 1890; King & Pantling, 1898; Duthie, 1906; Deva & Naithani, 1986). This species has not been recorded beyond Garhwal Hills in the Northwest Himalaya (Duthie, 1906; Seidenfaden & Arora, 1982; Vij *et al.*, 1982; Chowdhery & Wadhwala, 1984; Deva & Naithani, 1986). It is also a new record for Himachal Pradesh.

***Luisia zeylanica*** Lindl., Fol. Orch. *Luisia* 3. 1853; Seidenfaden, Dansk Bot. Ark. 27(4):62. 1971; Deva & Naithani, Orch. Fl. N.W. Himal. 413. 1986; Misra, Orch. Orissa 665. 2004. *L. teretifolia* auct. non Gaudich., 1826: Hook.f „ Fl. Brit. India 6: 22. 1890; King & Pantling, Ann. Roy. Bot. Gard. Calcutta 8:202. t. 271. 1898; Duthie, Ann. Roy. Bot. Gard. Calcutta 9:140. 1906.

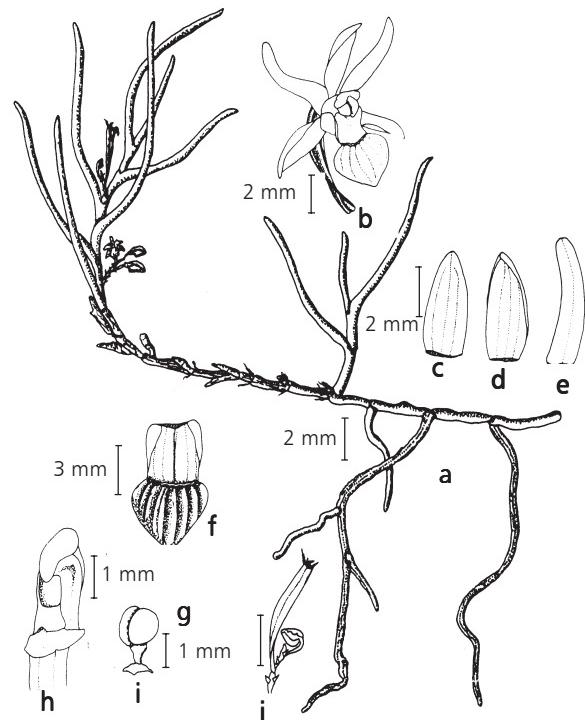
**Epiphytic herbs.** Stems rigid, somewhat woody, terete, tufted, 5-16 cm long, 3.5-4 mm thick, nodes 0.8-1.5 cm long, upper ones sheathed with leaf bases. Roots as thick as stem, branched or unbranched, pale green when young, more or less shriveled and grayish brown at maturity. Leaves 4-14 cm long, 3-4 mm thick, alternate, terete, acute, Raceme arising through the leaf sheath, 5-12 mm long, 1-3(-5) flowered, compact, flower buds and developing fruits seen simultaneously in some racemes; bracts minute, oblong, obtuse, broadly triangular, persistent. Flowers greenish pink or purple, 6-8 mm across; sepals subequal, margins involute; dorsal sepal 3-4 x 2-2.5 mm, pale green, erect, oblong-ovate, obtuse or subacute; lateral sepals, 3.5-4.5 x 2-2.5 mm, pale yellow, boat-shaped, keeled towards the apex, obliquely ovate-lanceolate, acute; petals 4.5-5.5 x 1-1.5 mm, pale yellow, slightly longer than sepals, linear-oblong, obtuse,

slightly falcate; lip fleshy with dark maroon horizontal bands, 5-6 mm long, divided into hypochile and epichile by a compressed and semicircular furrow; hypochile maroon, slightly shorter than epichile, concave, thin, erect; epichile maroon fading to reddish yellow at apex, triangular cordate, obscurely 3-lobed, 4-5 mm at the broadest, rhomboid; column reddish yellow, 2.5-3.5 x 1.5-2.5 mm, stout, oblong, slightly incurved, clinandrium cordate; rostellum short and broad, blunt; pollinia 2, yellow, 1.5 x 1.5 mm, ovoid, equal, stipe short, viscidium brown, rhomboid; ovary greenish yellow with purple base, 6-8 x 1-1.2 mm, curved at the apex. Capsule clavate, 23-28 x 4-6 mm, erect, ribbed.

**Flowering & Fruiting:** May-July

**Habitat:** An epiphyte in a semi-shaded and humid niche. Nests of yellow wasp (*Vespa* sp.) are invariably associated with this species. Rare

**Distribution:** India (Himachal Pradesh, Uttaranchal, Arunachal Pradesh, Meghalaya, Madhya Pradesh, Orissa, the Western Ghats, Andaman Islands), Nepal, Sri Lanka.



**Figure 1.** *Luisia zeylanica* Lindl. - a. Habit; b. Flower; c. Dorsal Sepal; d. Lateral Sepal; e. Petal; f. Lip; g. Column; h. Pollinarium; i. Fruit.

*Specimens Examined:* Himachal Pradesh, Mandi District ± 800 m, *Vij & Verma* 17909 (PAN).

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### Literature Cited

- Chowdhery, H. J. & B. M. Wadhwa 1984.** *Flora of Himachal Pradesh* 3. Botanical Survey of India, Calcutta.
- Deva, S. & H. B. Naithani 1986.** *The Orchid Flora of North West Himalaya*. Print and Media Associates, New Delhi.
- Duthie, J. F. 1906.** The Orchids of North-Western Himalaya. *Ann.*

*Roy. Bot. Gard. Calcutta* 9:81-211.

**Hooker, J. D. 1890.** *The Flora of British India* 6. L. Reeve & Co. Kent.

**King, G. & R. Pantling 1898.** *The Orchids of the Sikkim Himalaya*. Ann. Roy. Bot. Gard. Calcutta 8: 1-342.

**Seidenfaden, G. & C. M. Arora 1982.** An enumeration of the Orchids of northwestern Himalaya. *Nord. J. Bot.* 2:7-27.

**Vij, S. P., Toor, I. S. & N. Shekhan 1982.** Observations on the orchidaceous flora of Shimla and adjacent Hills in the N. W. Himalayas (ecology and distribution). *Res. Bull. (Sci.)Panjab Univ.* 33:163-75.

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